

Leaves and Tentacles of *Drosera* Species and Their Role in Heterotrophic Nutrition. *New Phytologist* 77, 51 (1976).

Chandler, G. E. and Anderson, J. W. Uptake and Metabolism of Insect Metabolites by Leaves and Tentacles of *Drosera* Species. *New Phytologist* 77, 625 (1976).

(Received 12/23/77)

CP Field Trip July 1977

by

Randall Scott Bennett

(517 E. State St., Ithaca, N. Y. 14850)

In July of 1977, I drove from Orlando, Florida, to San Jose, California. I also drove up the coast of California from L. A. to Oregon, but the area of primary interest here is western Florida, Mississippi and Alabama, where I sought out the CP indigenous to the area.

A short drive from where I was staying outside Orlando, I spotted *Drosera capillaris* in a savannah-like field as well as alongside a small stream with dark muddy banks. The banks were exposed because the stream had obviously receded a few yards. The southern states as well as California were experiencing a drought. The ground of the field in which the plants grew was dried and cracking and all of the *D. capillaris* were small and some sickly looking. I was not hopeful for the prospects of observing other species of CP.

My first day's drive took me to Tallahassee, Florida, where I spent the night. A short drive and ensuing search revealed a water moccasin, some long-legged water birds and a wild clematis plant, but no CP. The following day I planned to reach Mobile, Alabama. Accordingly, I took Rt. 319 South from Tallahassee into Rt. 98 West, passing through towns with

names like Crawfordville, Medart, and Sopchoppy. When I stopped along Rt. 98 near Carrabelle, Florida, I found *D. capillaris* growing in dry sandy places as well as wetter areas along ponds and small streams. Also seen was *D. intermedia*. The *D. intermedia* grew only in the wet areas further in from the roadside; the *D. capillaris*, however, extended almost to the road.

I was discouraged because many areas were dried up and I had not yet seen any *Pinguicula* or *Sarracenia*. Further west between Westbay and Destin, Florida, on Rt. 98, I found groupings of *Pinguicula* growing on the sloping intermediary area between the pine forest and the roadside ditch. The soil was very dry and sandy, and the ground was covered with pine needles. The butterworts were of a very pale yellow-green color. Some appeared almost without pigment. A number of plants had very long, thin leaves, and others had more moderately shaped leaves. I guessed that they were *P. lutea*, the "Florida Giant" variety, but there might have been some *P. pumila* among the smaller plants. I was hoping to see *P. primuliflora* and wondered if some of the larger plants might indeed be they.

Growing in the very same kind of habitat slightly further west near Fort Walton Beach, I found *P. planifolia*. This was surprising since I had been looking in whatever wet areas I could find for this plant and had found none. The *P. planifolia* was noticeably different from the first colony of butterworts; they were duller in appearance because of slight reddish pigmentation, especially along the curled edges. Also, the leaves were flatter and wider with only slight in-curling of the edges. The plants were set in the same fairly dry sandy soil — salt and pepper where exposed — with dried grey grass, pine needles, some green clubmoss and short green grasses as ground cover. I was very excited and the plants were quite beautiful — like jewels set in the

ground. Along with the *P. planifolia* grew *D. capillaris* and *D. intermedia*, with deep maroon-red coloration in the latter. It is interesting that the *P. planifolia* was growing in so dry a habitat, since it usually grows in a very wet habitat.

I drove on into Pensacola, Florida, and US Rt. 90, which would allow me to stop off the highway much more easily than Interstate 10. Looking from car window, I spotted long light green grass-like plants and thought, "*filiiformis* var. *Tracyii*!" Indeed, growing in extremely dry white sand, they stood about a foot and a half and almost two feet tall in some cases. Many juvenile plants grew smaller. I was surprised at how thick the petioles and filiform leaves were. Previously, I had only seen the smaller, red tentacle species in the N.J. Pine Barrens which grows to about a foot tall.

At the next stop in the Florida panhandle I saw, at first, some very sad-looking *S. psittacina*. They were drying up and were camouflaged by surrounding dried grasses. The flower stalks helped me find individual plants. A short walk brought me healthier plants which photographed well. While checking the dried seed pods I discovered that many were inhabited by an insect larvae, probably a moth, which I have heard loves to live out a portion of its life within *Sarracenia* seed pods. It was distressing because about 8 out of every 10 seed pods were infested, and it seems to destroy the seed. I wondered about the effects this would have on future populations of *Sarracenia*.

I stopped one last time in Florida and discovered *S. alata* growing along the roadside at the edge of a dry savannah. I walked in through the tall grasses and soon saw more *S. alata* and was rewarded, also, with the sight of *S. leucophylla*, a few plants of the smaller, red-veined variety. They are surely the most striking of the *Sarracenia*. Walking further, I saw a clump of *S. flava*; these were very large

plants with mouths probably a good three inches in diameter, and red patches in the throat. This clump of two or three plants showed the dog-day conditions in their brown spotted leaves.

In another area of the same savannah there were also more *S. psittacina* and some *S. rubra*, the small variety. Many of these plants, too, had been invaded by the moth larvae and occasionally a moth would flutter out from under the umbrella-like flower parts as I investigated.

Driving into Alabama I began noticing vast stands of *S. alata* so that, from my car, the savannahs and fields were streaked red with them. It was quite impressive. On examining the many plants of *S. alata*, I saw that some were green with red veins, others with deep red inside the mouth and on the underside of the ala, and older leaves were red and orange all over. The plants grew a short distance from the road and continued into the pine forest, on the northern side as far as I could see. The fields on the other side of the highway were also filled with *alata* and more were noticeable since the pine forest edge was about 150 yards in from the road. One last exciting find was an obvious hybrid between *S. alata* and *S. psittacina*.

(Received December 23, 1977)

SPECIAL ANNOUNCEMENT

Lynn H. Macey has moved (New address is 1377 Oakmont #10; McPherson, KS 67460). The plant exchange is back in operation. Lists are prepared quarterly with the main list out in February. No charge for listing, but the list will cost \$1.00 USA, Can., Mex., \$2.00 rest. Updates are out in May, August and September with new info only and will cost \$.50 domestic, \$1.00 rest each and can be ordered all or in part. See Issue #1 for other materials that Lynn offers through the Carnivorous Plant Information Service keeping the change in address in mind.